

**Notice of Allowability**

Application No.

08/951,733

Applicant(s)

HARRINGTON ET AL.

Examiner

William W. Moore

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1656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 14 June 2007 and the interview conducted 27 September 2007.
2. ☒ The allowed claim(s) is/are 1,2,5,7,8,11,13,14,26-29,33,36 and 37.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

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## EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes, and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

**Amend claims 1, 26-29, 33, 36 and 37 thus:**

1. (Amended) An isolated nucleic acid molecule ~~encoding a polypeptide~~ selected from the group consisting of:
  - (a) the nucleic acid molecule of SEQ ID NO:13;
  - (b) the nucleic acid molecule of SEQ ID NO:19;
  - (c) a nucleic acid molecule encoding the polypeptide of SEQ ID NO:14;
  - (d) a nucleic acid molecule encoding the polypeptide of SEQ ID NO:20[[,]] ; and,
  - (e) a nucleic acid molecule that is the full length complement of any of (a)-(d) above.
26. (Amended) A method of increasing the proliferation rate of an isolated a cell transformed or transfected with a vector comprising a nucleic acid molecule selected from the group consisting of SEQ ID NO:13 and SEQ ID NO:19, comprising expressing in the cell the transformed or transfected nucleic acid molecule of SEQ ID NO:13 or SEQ ID NO:19.
27. (Amended) A method of increasing telomerase activity in an isolated a cell transformed or transfected with a vector comprising a nucleic acid molecule selected from the group consisting of SEQ ID NO:13 and SEQ ID NO:19, comprising expressing in the cell the transformed or transfected nucleic acid molecule of SEQ ID NO:13 or SEQ ID NO:19.
28. (Amended) A method of decreasing telomerase activity in an isolated a cell transformed or transfected with a variant nucleic acid molecule of SEQ ID NO: 19, wherein the variant nucleic acid has the codon for aspartic acid at position 868 of SEQ ID NO:20 changed to a codon for alanine and the variant nucleic acid does not have telomerase protein 1 activity, comprising expressing the transformed or transfected a variant nucleic acid molecule of SEQ ID NO: 19 in the a cell, wherein the variant nucleic acid has the codon for aspartic acid at position 868 of SEQ ID NO:20 changed to a codon for alanine and the variant nucleic acid does not have telomerase protein 2 catalytic activity.
29. (Amended) An isolated nucleic acid molecule encoding a variant telomerase polypeptide, wherein the codon for aspartic acid at amino acid position 868 of SEQ ID NO:20 is changed

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to a codon for alanine, whereby expression of the nucleic acid molecule in a cell reduces telomerase activity in the cell.

33. (Amended) An isolated host cell ~~wherein the host cell is~~ transformed or transfected with an expression vector comprising a nucleic acid sequence encoding an amino acid sequence selected from the group consisting of SEQ ID NO:14 and SEQ ID NO:20 ~~to express a nucleic acid molecule comprising the sequence of SEQ ID NO: 13 or SEQ ID NO: 19.~~
36. (Amended) An isolated ~~A~~ non-human host cell comprising the vector of claim 7.
37. (Amended) An isolated ~~A~~ non-human host cell comprising the vector of claim 8.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Joseph Williams on 27 September 2007.

The following is an examiner's statement of reasons for allowance:

The examiner's amendment provides a proper Markush recitation for claim 1, amends claims 26-28 and 33 to provide a complete description of methods conforming to the disclosures at, e.g., page 21, lines 14-35, of the specification and to require that cells of claims 26-28 be isolated cells. Claim 29 is amended above to clarify the nature of the activity provided by an encoded variant polypeptide. The new claims 36 and 37 are amended to require that non-human host cells be isolated cells, and such cells are disclosed at page 28, lines 13-36, and also exemplified by the disclosure of murine neuroblastoma N2A host cells transfected by a vector comprising human TP2-encoding DNA at pages 85 and 86 of the specification. Thus amended, claims 1, 2, 5, 7, 8, 11, 13, 14, 26-29, 33, 36 and 37 are allowed herewith.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### *Conclusion*

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William W. Moore whose telephone number is 571.272.0933 and whose FAX number is 571.273.0933. The examiner can normally be reached Monday through Friday between 9:00AM and 5:30PM EST. If attempts to reach the examiner by telephone are

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unsuccessful, the examiner's Supervisory Primary Examiner, Dr. Kathleen Kerr Bragdon, can be reached at 571.272.0931. The official FAX number for all communications for the organization where this application or proceeding is assigned is 571.273.8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571.272.1600.



William W. Moore  
27 September 2007



KATHLEEN KERR BRAGDON, PH.D.  
SUPERVISORY PATENT EXAMINER